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09/848,065	05/03/2001	Sung-Min Kang	678-640 (P9740)	5560

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Paul J. Farrell  
DILWORTH & BARRESE, LLP  
333 Earle Ovington Blvd.  
Uniondale, NY 11553

EXAMINER

DANIEL JR, WILLIE J

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 12/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

TS

# Office Action Summary

Application No.

09/848,065

Applicant(s)

KANG, SUNG-MIN

Examiner

Willie J. Daniel, Jr.

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement (IDS) submitted on 03 May 2001 is in compliance with the provisions of 37 CFR 1.97 and is being considered by the examiner except for the other prior art reference **Item (1)** - "Australian Office Action dated September 12, 2002 issued in a counterpart application, namely, Appln. No. 97512/01."

Regarding other prior art section **Item (1)**, page 2 was not included in the reference.

### *Drawings*

2. Figure **1, 2, 3A, 3B** should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 2, 3, and 4** are rejected under 35 U.S.C. 102(b) as being anticipated by **Wong (WO 93/21715)**.

Regarding **Claim 1**, Wong discloses a method for processing messages in a cellular base station system (Fig. 1) including a plurality of subsystems (38, 40, 42) (see pg. 9, lines 11-16), comprising the steps of:

generating, in a source subsystem (38, 40, 42), a message heading code fields which hereinafter reads on the claimed “header” including an information field which hereinafter reads on the claimed “interface version field” having a source current running software version value (see pg. 5, line 9-17; Figs. 2, 3, 5);

generating, in the source subsystem (38, 40, 42), a message by assembling the generated message header and at least one information field (see pg. 5, line 9-17; Figs. 2, 3, 5); and

transmitting the generated message from the source subsystem (38, 40, 42) to a target subsystem (38, 40, 42) (see pg. 5, line 6-11; pg. 5, line 22 - pg. 6, line 8; pg. 9, lines 11-16; abstract; Figs. 1, 2, 3, 5), where this signaling protocol can be used between different types of communication systems as in this case a cellular base station system in which the base station controller and base station manager would be inherent.

Regarding **Claim 2**, Wong discloses a method for processing messages in a cellular base station system (see Fig. 1) including a plurality of subsystems (38, 40, 42) (see pg. 9, lines 11-16), comprising the steps of:

adding at least one field to a message format exchanged between the plurality of subsystems (38, 40, 42) in a software update process used by the plurality of subsystems (38, 40, 42) (see pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 16, lines 16-17; pg. 17, lines 4-8; abstract; Figs. 5, 7, 9, 10), where messages include an inserted label field and information block indicating the software package or release being used in which each package has a different message length based on the software package installed;

receiving, in a target subsystem (38, 40, 42), a message containing at least a message header from a source subsystem (38, 40, 42) (see pg. 5, line 9-17; Fig. 1, 2, 5, 7, 10);

comparing, in the target subsystem (38, 40, 42), a source current running version value contained in the received message header with a target current running version of the target subsystem (38, 40, 42) (see pg. 5, line 22 - pg. 6, line 8; pg. 6, lines 24-31; pg. 15, lines 2-18), where the communications takes place between the systems and subscribers which have different corresponding software packages and features;

processing, in the target subsystem (38, 40, 42), the received message including the added field, if the source current running version value is equivalent to the target current running version value (see pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 14, lines 3-32; pg. 15, lines 2-18; Fig. 1), where the systems will provide a handshake to determine which software version and features are running on the systems so the target system can know how to handle received messages; and

processing, in the target subsystem (38, 40, 42), the received message excluding the added field, if the source current running version value is not equivalent to the target current running version value (see pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 14, lines 3-32; pg. 15, lines 2-18; Fig. 1), where the systems will provide a handshake to determine which software version and features are running on the systems so the target system can know how to handle received messages.

Regarding **Claim 3**, Wong teaches of having a method wherein the target subsystem (38, 40, 42) includes a transmission/reception buffer, a size of which is set to a value capable of accepting the received message including the added field (see pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 16, lines 16-17; pg. 17, lines 4-8; Figs. 5, 7, 9, 10), where messages include an inserted label field and information block indicating the software package or release being used in which each software package has a different message length based on the software installed and the target system is able to handle messages of different lengths, therefore a buffer would be inherent .

Regarding **Claim 4**, Wong discloses a method for processing messages in a cellular base station system (Fig. 1) including a plurality of subsystems (38, 40, 42), comprising the steps of:

adding at least one field to a message format exchanged between the plurality of subsystems (38, 40, 42) in a software update process used by the plurality of subsystems (38, 40, 42) (see pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 16, lines 16-17; pg. 17, lines 4-8; abstract; Figs. 5, 7, 9, 10), where messages include an inserted label field and information

block indicating the software package or release being used in which each software package has a different message length based on the software package installed;

generating, in a source subsystem (38, 40, 42), a message heading code fields which reads on the claimed “header” including an information field which reads on the claimed “interface version field” having a source current running version value (see pg. 5, line 9-17; Figs. 2, 3, 5);

generating, in the source subsystem (38, 40, 42), a message by assembling the generated message header and at least one information field (see pg. 5, line 9-17; Figs. 2, 3, 5);

transmitting the generated message from the source subsystem to a target subsystem (see pg. 5, line 6-11; pg. 5, line 22 - pg. 6, line 8; pg. 9, lines 11-16; abstract; Figs. 1, 2, 3, 5), where this signaling protocol can be used between different types of communication systems (e.g., cellular base station system) in which the base station controller and base station manager would be inherent;

comparing, in the target subsystem (38, 40, 42), the source current running version value in the received message header with a target current running version value of the target subsystem (38, 40, 42) (see pg. 5, line 22 - pg. 6, line 8; pg. 6, lines 24-31; pg. 15, lines 2-18), where the communications takes place between the systems and subscribers which have different corresponding software packages and features;

processing, in the target subsystem (38, 40, 42), the received message including the added field, if the source current running version value is equivalent to the target current running version value (see pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 14, lines 3-32; pg. 15, lines 2-18; Fig. 1), where the systems will provide a handshake to determine which software

version and features are running on the systems so the target system can know how to handle received messages; and

processing, in the target subsystem (38, 40, 42), the received message excluding the added field, if the source current running version value is not equivalent to the target current running version value (see pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 14, lines 3-32; pg. 15, lines 2-18; Fig. 1), where the systems will provide a handshake to determine which software version and features are running on the systems so the target system can know how to handle received messages.



***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 5 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wong (WO 93/21715)** in view of **Rojestal (US 6,074,435)** and **Scholz et al. (US 5,421,017)**.

Regarding **Claim 5**, Wong teaches of having a method for processing messages in a cellular base station subsystem including a plurality of subsystems (38, 40, 42), comprising the steps of: adding at least one field to a message format exchanged between the plurality of subsystems in an update process of software used by the plurality of subsystems (38, 40, 42) (see pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 16, lines 16-17; pg. 17, lines 4-8; Fig. 1), where messages include an inserted label field and information block indicating the software package or release being used in which each software package has a different message length based on the software installed. Wong fails to disclose the base station manager backing up a previous software version and a base station restarting during installation of downloaded software. However, the examiner maintains that having the base station manager backing up a previous software version and a base station to restart during installation of downloaded software was well known in the art, as taught by Scholz et al. and Rojestal.

In the same field of endeavor, Scholz et al. teaches of having the controlling system which reads on the claimed "base station manager" having a previous software version to revert back to (see col. 4, lines 17-33; col. 5, lines 19-31), where the control system has a

switch-over process to allow switching between versions of software in which a system can return to the previous software version. Wong and Scholz et al. fails to disclose having the base station restart during installation of downloaded software. However, the examiner maintains that having a base station to restart during installation of downloaded software was well known in the art, as taught by Rojestal.

In the same field of endeavor, Rojestal teaches of having the base station (107) restart (ref. 77) during the downloading of software (see col. 4, lines 48-63; col. 6, lines 5-12; Figs. 7, 10, 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Wong, Scholz et al., and Rojestal to have a method for processing messages in a cellular base station subsystem including a plurality of subsystems, comprising the steps of: adding at least one field to a message format exchanged between the plurality of subsystems in an update process of software used by the plurality of subsystems; installing, in a base station manager for controlling the base station system, an updated version of the software and then backing-up a previous version of the software; and downloading a selected one of the updated version and the previous version of the software from the base station manager and installing the downloaded software, when at least one of the plurality of subsystems restarts.

The advantage of combining the teachings of Wong, Scholz et al., and Rojestal is to remotely be able to download and replace the software with a newer version in a base transceiver station.

Regarding **Claim 6**, the combination of Wong, Scholz et al., and Rojestal disclose everything claimed, as applied above (see claim 5), in addition Wong further teaches of a method further comprising the steps of:

transmitting, in a source subsystem (38, 40, 42), a message having a message header including an interface version field having a source current running version value to a target subsystem (see pg. 5, line 6-11; pg. 5, line 22 - pg. 6, line 8; pg. 9, lines 11-16; abstract; Figs. 1, 2, 3, 5), where this signaling protocol can be used between different types of communication systems (e.g., cellular base station system) in which the base station controller and base station manager would be inherent;

detecting, in the target subsystem (38, 40, 42), the source current running version value from the received message header (see pg. 5, lines 9-17; pg. 5, line 22 - pg. 6, line 8; pg. 6, lines 24-31; pg. 15, lines 2-18), where the information field determines which software package is running on the system when communications takes place between the subsystems and subscribers which have different corresponding software packages and features;

processing in the target subsystem (38, 40, 42), the received message using the updated version of the software, if the source current running version value is equivalent to a target current running version value of the target subsystem (38, 40, 42) (see pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 14, lines 3-32; pg. 15, lines 2-18; Fig. 1), where the systems will provide a handshake to determine which software version and features are running on the systems so the target system can know how to handle received messages; and

processing, in the target subsystem, the received message using the previous version of the software, if the source current running version value is not equivalent to the target current

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running version value of the target subsystem (38, 40, 42) (see pg. 6, lines 24-31; pg. 13, lines 20-29; pg. 14, lines 3-32; pg. 15, lines 2-18; Fig. 1), where the systems will provide a handshake to determine which software version and features are running on the systems so the target system can know how to handle received messages.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. **Pehrson (US 6,339,705)** discloses *Management of Multiple Types of Radio Base Stations in a Telecommunication System*.

b. **Anzai et al. (US 5,982,762)** discloses *Wireless LAN System, Base Station Device and Wireless Terminal Device Therefor, and Method For Relaying Information Frame*.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (703) 305-8636. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-3180.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-5424.

WJD,JR/wjd,jr  
12 December 2003

*Marsha D Banks-Harold*  
MARSHA D. BANKS-HAROLD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600